tremely interested in the possibility of a channel's opening on the VHF band.

The New York ETV station, which is to go on the air within a few months, is expected to become the anchor of the budding "fourth network" of approximately 50 ETV stations now in operation in various parts of the country. These stations, linked by exchanges of films and tapes, rather than through electronic ties, are supported by contributions from their home states and localities, foundations, business firms, and individuals. The addition of the wealthy and populous New York area to the network is likely to have a significant effect on the scope of the network's programing. Los Angeles is being viewed with interest by the FCC and others because of the resources it could bring to the ETV network, and because of the vast audience within range of its transmitters.—D.S.G.

West Ford: A Little More Data

The quest for what went wrong with the controversial Project West Ford has produced a few scraps of additional data, but none of it adds up yet to a definitive answer.

The object of West Ford was to establish in space a band of 350-million copper filaments to serve as an artificial ionosphere in communications experiments. The filaments were sent aloft embedded in naphthalene, which was expected to sublimate in space, slowly releasing them as it moved in orbit. Previous radar sightings indicated the presence of the cylindrical naphthalene and wire body, but there has been no evidence that the filaments have been released from the naphthalene.

The latest findings involve radar returns at Millstone Hill, in Westford, Massachusetts, which indicate the presence of several small objects, considerably larger than individual filaments, in the area where the orbiting package was expected to be. This suggests the possibility that the naphthalene package may have broken into several pieces. The data is regarded, however, as offering no insights on how to avoid failure the next time.

A spokesman at the Lincoln Laboratory in Lexington, Massachusetts, said that a number of theories for West Ford's failure are under consideration, including some that are regarded as rather unlikely. These include the possibility that ultraviolet light or cosmic rays may have had some effect on the

naphthalene and prevented it from sublimating, or that the naphthalene did sublimate but some force is preventing the dispersal of the wires.

The project stirred considerable opposition from radio and optical astronomers, who claimed the orbiting wires would interfere with their observations. The Administration, on the basis of several reviews by scientific panels, rejected these fears as unfounded. There is no sign of eagerness, however, to go ahead with another shot until all efforts have been exhausted to determine what went wrong with the first. As one scientist associated with Project West Ford commented: "Probably the surest way to get needles in the first package to disperse is to send up another package." ---D.S.G.

Exchange Pact: Renewal Delayed

Negotiations for renewal of the Soviet-American exchange agreement remained uncompleted at the agreement's 31 December expiration date. State Department officials, however, discount major differences as the cause, and attribute the delay to a lack of urgency for concluding a new agreement and, possibly, to the impending arrival of a new Soviet ambassador in Washington.

It is tacitly assumed, they point out, that the expired agreement will govern existing exchanges as well as those that remain to be carried out, pending completion of negotiations. The agreement ran for 2 years and governed cultural, educational, scientific, technical exchanges.

The negotiations will be conducted in Washington, thus making the Soviet ambassador at least the nominal head of his nation's delegation. State Department officials speculate that the new ambassador, who is expected to arrive shortly, could extract a measure of good will by starting his tour of duty with the speedy completion of a new agreement.

American proposals for renewing the program were submitted in October following Soviet-American discussions last summer. The Soviet reply has not yet been received. The principal differences involve the American desire to expand our cultural activities in the Soviet Union, principally in the dissemination of American publications, and the Soviet desire to concentrate on scientific and technical exchanges. —D.S.G.

Announcements

A reference directory of U.S. science information services has been published by the National Science Foundation. The 530-page book contains descriptions of 427 scientific and engineering information centers, types of information services provided, and publications issued by each. (Superintendent of Documents, Government Printing Office, Washington 25, D.C. \$1.75)

Physicians are requested to refer patients with **chronic myelogenous leukemia** to the National Cancer Institute. Referrals of patients with high white-blood-cell and platelet counts are needed for studies of newer chemotherapeutic agents, and as a source of white cells and platelets for *in vitro* and *in vivo* study. Accepted patients will be hospitalized for approximately 8 to 12 weeks. (Paul P. Carbone, Chemotherapy Service, NCI, Bethesda 14, Md.)

A brochure describing the U.S. Public Health Service's research training programs in the basic medical and biological sciences is available from the National Institutes of Health. (Information Office, Division of General Medical Sciences, NIH, Bethesda 14, Md. PHS No. 865)

Researchers who are interested in the potential effects of ionizing radiation on vegetation are invited to utilize the facilities of Brookhaven National Laboratory's recently established program in radiation ecology. A limited number of postdoctoral appointments are available. (G. M. Woodwell, Biology Dept., BNL, Upton, N.Y.)

The facilities of the **Biophysical Society's placement service** will be available free of charge during their annual meeting (Washington, D.C., 13–16 Feb. 1962). The service has listings of positions open in the several areas of biophysics, as well as candidates for positions in these fields. (Biophysical Society Placement Service, Box 668, Frederick, Md.)

Grants, Fellowships, and Awards

Recent college graduates are eligible to apply for scholarships in naval architecture and marine engineering, available for the 1962 academic year. The scholarships, sponsored by the So-

ciety of Naval Architects and Marine Engineers, will cover tuition at the college selected, plus \$1600 for living expenses. Deadline: *1 February 1962*. (W. N. Landers, 74 Trinity Place, New York 6)

Fellowships (\$2000-\$4000) and 12-month assistantships (minimum \$2100) in **oceanography and meteorology** for the 1962-63 academic year are available to graduates in physics, chemistry, geology, meteorology, biology, and engineering. (Dale F. Leipper, Dept. of Oceanography and Meteorology, Texas A. & M., College Station)

Two fellowships in parapsychology, leading to the master's degree in psychology, are available at the City College of New York. Applicants must qualify as matriculants in psychology, and must conduct research in parapsychology for their masters' theses. Deadline: 1 March 1962. (Gertrude Schmeidler, Department of Psychology, City College, New York 31)

Fellowships in biostatistics are available in the recently established department of statistics at Johns Hopkins School of Hygiene and Public Health. The department is also planning to offer assistantships for the 1962–63 academic year. (Allyn W. Kimball, 615 N. Wolfe St., Baltimore 5, Md.)

The Medical Library Association is offering a \$150 scholarship for each of the following courses in **medical librarianship**. Students who complete the courses will be eligible for MLA grade I certification.

Medical literature and librarianship: Columbia University, New York (3 July-11 Aug.).

Medical librarianship: Drexel Institute, Philadelphia (5 Apr.-7 June); Emory University, Atlanta, Ga. (18 June-27 July 1962); and University of North Carolina, Chapel Hill (5 Feb.-31 May).

Medical literature and reference work: University of Illinois, Urbana (2 Feb.-8 June).

Bibliography of the biomedical and physical sciences: University of Southern California, Los Angeles (25 June-3 Aug.).

Introduction to medical librarianship: Western Reserve University, Cleveland (5 Feb.-9 June).

Applications should be sent to the dean of the library school in each of the aforementioned universities.

Scientists in the News

Alan T. Waterman, director of the National Science Foundation, will become president-elect of the AAAS on 15 January. Henry Eyring, of the University of Utah, and William W. Rubey, of the University of California (Los Angeles), have been reelected to the Board of Directors for 4-year terms.

Stanley S. Ballard, of the University of Florida, has been elected a new member of the AAAS Committee on Council Affairs for a 3-year term. Stanley A. Cain, of the University of Michigan, and Frank B. Wood, of the University of Pennsylvania, have been reelected to 3-year terms on the committee.

Samuel B. Weiss, associate professor of biochemistry at the University of Chicago, has won the 1961 Theobald Smith award for his work in RNA biosynthesis. The \$1000 award, given by Eli Lilly and Company under the auspices of the AAAS, is presented annually for demonstrated research in the medical sciences which shows independence of thought and originality.

Hunter Dupree (department of history, University of California, Berkeley), whose book, Science in the Federal Government, a History of Policies and Activities, was published in 1957, is now directing a research project on the activities of the federal government in science from 1940 to 1960.

Francis H. C. Crick, biologist and a fellow of the Royal Society of London, has received the Charles-Leopold Mayer prize for his work with nuclear acids, polyglycines, and collagen. The award, presented by the French Academy of Sciences, amounts to approximately \$15,000 (65,000 NF).

Willis R. Boss, former science attaché to the U.S. Embassy in Tokyo, has been appointed chief of the National Cancer Institute's training branch.

Richard L. Stone, of General Electric Company's defense systems department, has joined General Mills' electronics group as an instrument and control systems product manager.

Lawrence Slote, senior research scientist at New York University's college of engineering, has joined the staff of Nuclear Research Associates in New York.

Andrew Gemant, former staff physicist at the Detroit Edison Company, has been appointed to the research staff of the Grace Hospital in Detroit.

Roman Vishniac, biologist and scientific cinematographer, has been appointed professor of biology education at Yeshiva University in New York.

Jan J. Hermans, professor and director of the Cellulose Research Institute at the State University of Forestry in New York, has been named senior staff scientist at the Chemstrand Research Center in Durham, N.C.

Stella L. Deignan, former director of science information exchange at the National Institutes of Health, has been named scientist administrator in NIH's Office of International Research. She will be stationed at World Health Organization headquarters in Geneva, Switzerland.

James E. Reeves, assistant manager for field operations in the U.S. Atomic Energy Commission's Albuquerque (N.M.) operations office, has received the AEC's distinguished service award. Reeves is also manager of the commission's Nevada Test Site Organization.

Recent Deaths

Clyde Biddulph, 49; professor of physiology at Utah State University; 5 Dec.

Chi H. Chin, 42; assistant professor of microbiology at Wayne State University; 29 Nov.

Vernon C. David, 79; retired clinical professor of surgery at the University of Illinois' medical college; 15 Nov.

Humphrey Ezell, Jr., 33; senior nuclear scientist with the Oak Ridge Institute of Nuclear Studies' special training division; 21 Dec.

Ernst Haase, 66; assistant neurology professor at the Chicago Professional Colleges; 10 Oct.

Herman H. Kahlenberg, 60; scientific director and owner of Kahlenberg Laboratories in Sarasota, Fla.; 17 Dec.

Yusuf G. Namedaliev, 57; president of the Azerbaidzhan Academy of Sciences. U.S.S.R.; 16 Dec.

J. Homer Sanford; consulting hydrologist in New York; 26 Oct.

Jesse W. Sprowls, 74; professor of psychology at the University of Maryland from 1927 until his retirement in 1957; 13 Dec.